AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A gray scale column driver for a thick dielectric electroluminescent display, comprising:

a counter receiving gray level data from an incoming video signal and in response counting for a time interval proportional to said gray level data; and

a non linear voltage ramp generator connected to said counter, said non linear voltage ramp generator outputting a ramping voltage for application to columns of said display during said time interval, wherein said ramping voltage, between its start and peak, conforms to a curve having an inverted s-shape, with an initial convex portion followed by a concave portion so as to compensate for luminance versus voltage characteristics of said thick dielectric electroluminescent display.

2. (Currently Amended) The gray scale column driver of claim 1, wherein said initial convex portion conforms ~~generally~~ to a negative second derivative with respect to said time interval, and said concave portion conforms generally to a positive second derivative with respect to said time interval.

3. (Previously Presented) The gray scale column driver of claim 1, wherein said counter is an 8-bit counter for delineating said time interval to fully define 256 gray levels.

4. (Previously Presented) The gray scale column driver of claim 1, wherein said ramping voltage for a negative row voltage is $V_{g\,neg}(t_m - t)$ expressed as a function of the difference between the time t_m for the ramping voltage to reach a maximum

luminance voltage value V_m at the end of said time interval, and wherein said ramping voltage for a positive row voltage is $V_{g\,pos.}(t)$, where $V_{g\,pos.}(t) = V_m - V_{g\,neg}(t_m - t)$ and said gray level data is converted to complement valves.

5. (Previously Presented) The gray scale column driver of claim 4, wherein said non linear voltage ramp generator further comprises an integrator circuit and at least two current sources ~~for~~ generating and applying different currents to said integrator circuit such that when a first one of said current sources is connected to said integrator circuit a first segment of said ramping voltage is generated, when both of said current sources are connected in parallel to said integrator circuit a second segment of said ramping voltage is generated, and when the second one of said current sources is connected to said integrator circuit a final segment of said ramping voltage is generated.

6. (Previously Presented) The gray scale column driver of claim 5, wherein said first one of said current sources generates a current that decreases during said time interval, and said second one of said current sources generates a current that increases during said time interval.

7. (Previously Presented) The gray scale column driver of claim 5, wherein said at least two current sources are time-dependent voltage feedback controlled current sources.

8. (Withdrawn) The gray scale column driver of claim 5, wherein said at least two current sources are constant current sources.

9. (Previously Presented) The gray scale column driver of claim 5, wherein said non linear voltage ramp generator further comprises a threshold control circuit for controlled switching between said two current sources.

10. (Previously Presented) The gray scale column driver of claim 5, wherein said non linear voltage ramp generator further comprises a frame polarity control circuit selecting between said ramping voltage for a positive row voltage and said ramping voltage for a negative row voltage.

11. (Previously Presented) The gray scale column driver of claim 5, wherein said current sources further include control inputs controlling curvature of said first and second segments respectively.

12. (Previously Presented) The gray scale column driver of claim 9, wherein said threshold control circuit further includes a control input setting a transition voltage between said first and second segments of said ramping voltage.

13. New) The gray scale column driver of claim 1 wherein the initial convex portion of the ramping voltage is more pronounced for positive row voltages as compared to negative row voltages and wherein the concave portion of the ramping voltage is more pronounced for negative row voltages as compared to positive row voltages.

14. (New) The gray scale column driver of claim 2 wherein the initial convex portion of the ramping voltage is more pronounced for positive row voltages as compared to negative row voltages and wherein the concave portion of the ramping voltage is more pronounced for negative row voltages as compared to positive row voltages.

15. (New) The gray scale column driver of claim 4 wherein the initial convex portion of the ramping voltage is more pronounced for positive row voltages as

compared to negative row voltages and wherein the concave portion of the ramping voltage is more pronounced for negative row voltages as compared to positive row voltages.